

REMARKS

Entry of the foregoing, re-examination and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow, are respectfully requested.

Claims 17 and 35 have been amended and new claims 37-38 submitted, in order to add a proviso disclosed on page 11, lines 11-17 of the specification. Claim 17 has been amended to add the feature disclosed on page 5, lines 7-11 of the specification. Claims 17-30 and 33-38 are now pending in this application.

Claims 17-25, 28-30 and 33-36 have been rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent 5,523,377 to Konig et al for reasons set forth on page 3 of the Office Action. Reconsideration of this rejection is requested in view of the above amendments and for at least the following comments.

The present claims, as amended, now contain a proviso that excludes unsubstituted 5-membered heterocyclics such as 1,2,4-triazole used as a blocking agent in Konig '064. In light of the present amendments, the §102(b) rejection over Konig '064 should be withdrawn and such action is respectfully requested.

Claims 26 and 27 were rejected under 35 U.S.C. §103(a) as unpatentable over Konig '064 as set forth on page 3 of the Office Action. Reconsideration of this rejection is requested for at least the following reasons.

Konig '064 does not disclose or suggest the use of substituted triazoles having the characteristics set forth in the present claims, as amended. The use of unsubstituted

triazoles as blocking agents, can lead to solubility problems as discussed on page 11, lines 4-17 of the disclosure. Konig '064 does not discuss solubility problems caused by the use of unsubstituted triazoles and thus, contains no teaching which would motivate those of ordinary skill to seek means for solving these problems.

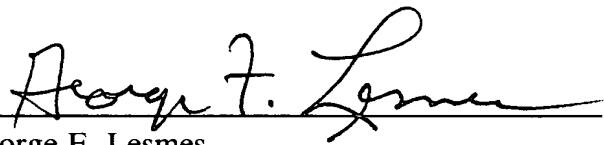
Konig '064 also fails to disclose or suggest that the overall release temperature is equal to or close to that of the group which is released first, i.e., at the lowest temperature. This feature is now set forth in claim 17 and further distinguishes the claimed invention from that disclosed in the reference.

In view of the aforementioned amendments and for at least the reasons discussed above, the §103(a) rejection over Konig '064 should be withdrawn. Such action is earnestly solicited.

In view of the above amendments and remarks, it is respectfully submitted that this application is now in allowable condition. An early and favorable indication to that effect is earnestly solicited.

Respectfully submitted,

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Marked-up Claims 17 and 35

Kindly replace claims 17 and 35 as follows:

17. (Twice Amended) A composition comprising aliphatic isocyanates, at least partially blocked by at least two different blocking agents, one of the blocking agents reacting with the isocyanate functional group via an OH group and the other reacting with the isocyanate functional group via an NH group or the at least two blocking agents reacting with the isocyanate functional group via an OH group, the at least two blocking agents having a deblocking temperature of between 80 and 200°C in the octanol test and being selected so that, in the octanol test at 110°C, the ratio

$$D = \frac{\text{percentage in equivalents of blocking agent which deblocks first at 110°C}}{\text{percentage in equivalents of blocking agent which deblocks last at 110°C}}$$

is greater than 4/3, with the proviso that, when a blocking agent comprises a phenol functional group as blocking functional group, it does not comprise a COOH functional group and that, when one of the blocking agents is a 5-membered nitrogenous heterocycle having substituents, the sum in equivalent of the carbon atoms of the substituent groups with regard to the nitrogenous ring (number of carbon atoms of the substituent groups/number of 5-membered nitrogenous ring) is at least equal to 4, and when the composition comprises more than two blocking functional groups and one of the agents

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represents a five-membered nitrogenous heterocycle, the composition comprises more than 30 equivalent % of blocking agents reacting with the isocyanate functional group via the OH functional group, wherein said at least partially blocked aliphatic isocyanates fulfill the following conditions:

- at least one third of the free or blocked NCO functional groups are connected to a hydrocarbonaceous backbone via a saturated (sp^3) carbon;
- at least one third of said saturated (sp^3) carbons carry at least one hydrogen; and
- at least one third of said saturated (sp^3) carbons are connected to said backbone via a carbon atom itself bearing at least one hydrogen, the overall release temperature, as measured by the octanol test, is that of, or at the very least, very close to that of the group which is released first, that is, the lowest temperature.

35. (Twice Amended) A process for the preparation of a composition, comprising the step of reacting an aliphatic (poly)isocyanate composition, successively or simultaneously, with at least two different blocking agents, one of the blocking agents reacting with the isocyanate functional group via an OH group and the other reacting with the isocyanate functional group via an NH group or the at least two blocking agents reacting with the isocyanate functional group via an OH group, the at least two blocking

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Marked-up Claims 17 and 35

agents having a deblocking temperature of between 80 and 200°C in the octanol test and being selected so that, in the octanol test at 110°C, the ratio

$$D = \frac{\text{percentage in equivalents of blocking agent which deblocks first at 110°C}}{\text{percentage in equivalents of blocking agent which deblocks last at 110°C}}$$

is greater than 4/3, with the proviso that, when a blocking agent comprises a phenol functional group as blocking functional group, it does not comprise a COOH functional group and that, when one of the blocking agents is a 5-membered nitrogenous heterocycle having substituents, the sum in equivalent of the carbon atoms of the substituent groups with regard to the nitrogenous ring (number of carbon atoms of the substituent groups/number of 5-membered nitrogenous ring) is at least equal to 4, and when the polyisocyanate composition comprises more than two blocking functional groups and one of the agents represents a five-membered nitrogenous heterocycle, the composition comprises more than 30 equivalent % of blocking agents reacting with the isocyanate functional group via the OH functional group, wherein the following conditions are fulfilled:

- at least one third of the free or blocked NCO functional groups are connected to a hydrocarbonaceous backbone via a saturated (sp³) carbon;
- at least one third of said saturated (sp³) carbons carry at least one hydrogen; and

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Marked-up Claims 17 and 35

- at least one third of said saturated (sp^3) carbons are connected to said backbone via
a carbon atom itself bearing at least one hydrogen.